



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECfp[®]_rate2006 = 79.6

ASUS Sabertooth 990FX (AMD FX-8150)

SPECfp_rate_base2006 = 78.8

CPU2006 license: 13

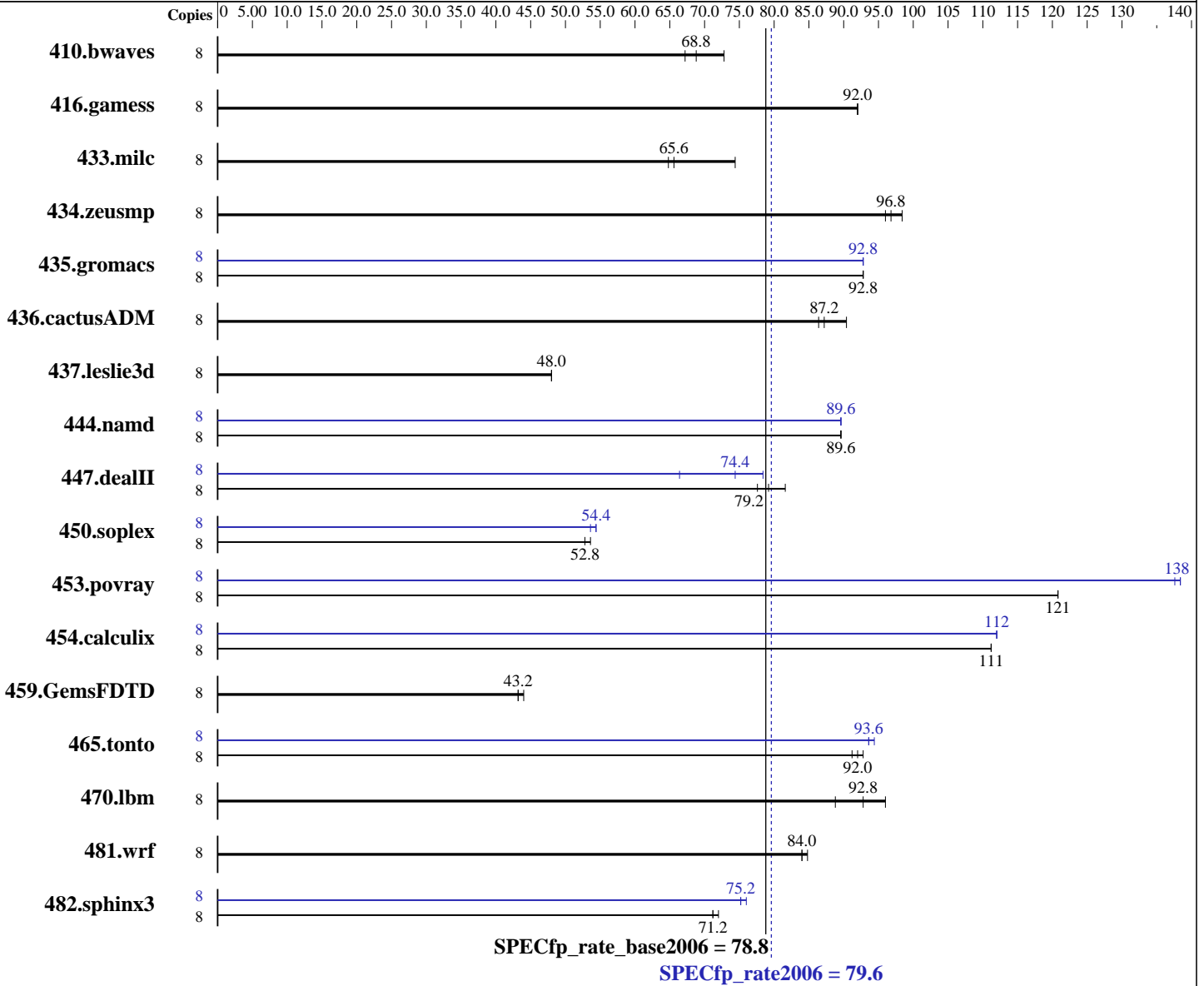
Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Oct-2011

Hardware Availability: Nov-2011

Software Availability: Apr-2011



Hardware

CPU Name: AMD FX-8150
 CPU Characteristics: AMD Turbo CORE technology up to 4.20 GHz
 CPU MHz: 3600
 FPU: Integrated
 CPU(s) enabled: 8 cores, 1 chip, 8 cores/chip
 CPU(s) orderable: 1 chip

Continued on next page

Software

Operating System: Windows 7 Ultimate SP1 (64-bit)
 Compiler: C/C++: Version 12.0.3.176 of Intel C++ Studio XE for Windows;
 Fortran: Version 12.0.3.176 of Intel Visual Fortran Studio XE for Windows;
 Libraries: Version 15.00.30729.01 of Microsoft Visual Studio 2008 Professional SP1

Auto Parallel: No
 File System: NTFS

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECfp_rate2006 = 79.6

ASUS Sabertooth 990FX (AMD FX-8150)

SPECfp_rate_base2006 = 78.8

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Oct-2011
Hardware Availability: Nov-2011
Software Availability: Apr-2011

Primary Cache: 256 KB I on chip per chip,
64 KB I shared / 2 cores;
16 KB D on chip per core
Secondary Cache: 8 MB I+D on chip per chip, 2 MB shared / 2 cores
L3 Cache: 8 MB I+D on chip per chip
Other Cache: None
Memory: 8 GB (2 x 4 GB 2Rx4 PC3-10600U-9)
Disk Subsystem: Intel 160GB SSD
Other Hardware: None

System State: Default
Base Pointers: 32/64-bit
Peak Pointers: 32/64-bit
Other Software: SmartHeap Library Version 9.01 from
<http://www.microquill.com/>

Results Table

Benchmark	Base								Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio		
410.bwaves	8	1501	72.8	<u>1579</u>	<u>68.8</u>	1627	67.2	8	1501	72.8	<u>1579</u>	<u>68.8</u>	1627	67.2		
416.gamess	8	1701	92.0	<u>1700</u>	<u>92.0</u>	1696	92.0	8	1701	92.0	<u>1700</u>	<u>92.0</u>	1696	92.0		
433.milc	8	989	74.4	<u>1118</u>	<u>65.6</u>	1126	64.8	8	989	74.4	<u>1118</u>	<u>65.6</u>	1126	64.8		
434.zeusmp	8	759	96.0	<u>751</u>	<u>96.8</u>	742	98.4	8	759	96.0	<u>751</u>	<u>96.8</u>	742	98.4		
435.gromacs	8	618	92.8	615	92.8	<u>616</u>	<u>92.8</u>	8	616	92.8	617	92.8	<u>617</u>	<u>92.8</u>		
436.cactusADM	8	1102	86.4	1061	90.4	<u>1094</u>	<u>87.2</u>	8	1102	86.4	1061	90.4	<u>1094</u>	<u>87.2</u>		
437.leslie3d	8	1567	48.0	<u>1573</u>	<u>48.0</u>	1577	48.0	8	1567	48.0	<u>1573</u>	<u>48.0</u>	1577	48.0		
444.namd	8	<u>719</u>	<u>89.6</u>	719	89.6	717	89.6	8	<u>717</u>	<u>89.6</u>	717	89.6	717	89.6		
447.dealII	8	<u>1160</u>	<u>79.2</u>	1178	77.6	1119	81.6	8	1382	66.4	<u>1226</u>	<u>74.4</u>	1169	78.4		
450.soplex	8	1251	53.6	1258	52.8	<u>1256</u>	<u>52.8</u>	8	<u>1234</u>	<u>54.4</u>	1239	53.6	1226	54.4		
453.povray	8	352	121	<u>352</u>	<u>121</u>	352	121	8	309	138	308	138	<u>308</u>	<u>138</u>		
454.calculix	8	<u>594</u>	<u>111</u>	594	111	591	111	8	591	112	<u>591</u>	<u>112</u>	591	112		
459.GemsFDTD	8	1946	44.0	1978	43.2	<u>1962</u>	<u>43.2</u>	8	1946	44.0	1978	43.2	<u>1962</u>	<u>43.2</u>		
465.tonto	8	851	92.8	<u>853</u>	<u>92.0</u>	863	91.2	8	834	94.4	<u>839</u>	<u>93.6</u>	842	93.6		
470.lbm	8	<u>1186</u>	<u>92.8</u>	1241	88.8	1148	96.0	8	<u>1186</u>	<u>92.8</u>	1241	88.8	1148	96.0		
481.wrf	8	1065	84.0	1053	84.8	<u>1061</u>	<u>84.0</u>	8	1065	84.0	1053	84.8	<u>1061</u>	<u>84.0</u>		
482.sphinx3	8	2187	71.2	<u>2182</u>	<u>71.2</u>	2176	72.0	8	<u>2063</u>	<u>75.2</u>	2070	75.2	2058	76.0		

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Submit Notes

The config file option 'submit' was used.
The start command with the /affinity switch was used to bind processes to cores

Base Compiler Invocation

C benchmarks:
icl -Qvc9 -Qstd=c99

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECfp_rate2006 = 79.6

ASUS Sabertooth 990FX (AMD FX-8150)

SPECfp_rate_base2006 = 78.8

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Oct-2011
Hardware Availability: Nov-2011
Software Availability: Apr-2011

Base Compiler Invocation (Continued)

C++ benchmarks:
icl -Qvc9

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc9 -Qstd=c99 ifort

Base Portability Flags

410.bwaves: -DSPEC_CPU_P64 -names:lowercase
416.gamess: -DSPEC_CPU_P64
433.milc: -DSPEC_CPU_P64
434.zeusmp: -DSPEC_CPU_P64
435.gromacs: -DSPEC_CPU_P64
436.cactusADM: -DSPEC_CPU_P64 -names:lowercase /assume:underscore
437.leslie3d: -DSPEC_CPU_P64
444.namd: -DSPEC_CPU_P64 /TP
447.dealII: -DSPEC_CPU_P64 -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
450.soplex: -DSPEC_CPU_P64
453.povray: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_P64 -DSPEC_CPU_NOZMODIFIER -names:lowercase
459.GemsFDTD: -DSPEC_CPU_P64
465.tonto: -DSPEC_CPU_P64
470.lbm: -DSPEC_CPU_P64
481.wrf: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
482.sphinx3: -DSPEC_CPU_P64

Base Optimization Flags

C benchmarks:
/arch:SSE3 -Qipo -O3 -Qprec-div- -Qansi-alias -Qauto-ilp32
/F1000000000 -link /FORCE:MULTIPLE

C++ benchmarks:
/arch:SSE3 -Qipo -O3 -Qprec-div- -Qansi-alias -Qcxx-features
-Qauto-ilp32 /F1000000000 shlw64M.lib -link /FORCE:MULTIPLE

Fortran benchmarks:
/arch:SSE3 -Qipo -O3 -Qprec-div- -Qansi-alias /F1000000000
-link /FORCE:MULTIPLE

Benchmarks using both Fortran and C:
/arch:SSE3 -Qipo -O3 -Qprec-div- -Qansi-alias -Qauto-ilp32
/F1000000000 -link /FORCE:MULTIPLE



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECfp_rate2006 = 79.6

ASUS Sabertooth 990FX (AMD FX-8150)

SPECfp_rate_base2006 = 78.8

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Oct-2011
Hardware Availability: Nov-2011
Software Availability: Apr-2011

Peak Compiler Invocation

C benchmarks:
icl -Qvc9 -Qstd=c99
C++ benchmarks:
icl -Qvc9
Fortran benchmarks:
ifort
Benchmarks using both Fortran and C:
icl -Qvc9 -Qstd=c99 ifort

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
433.milc: basepeak = yes
470.lbm: basepeak = yes
482.sphinx3: /arch:SSE3 -Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias
-Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE
C++ benchmarks:
444.namd: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Oa -Qauto-ilp32 /F1000000000
shlW64M.lib -link /FORCE:MULTIPLE
447.dealII: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias
-Qscalar-rep- -Qauto-ilp32 /F1000000000 shlW64M.lib
-link /FORCE:MULTIPLE
450.soplex: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qauto-ilp32 /F1000000000 shlW64M.lib
-link /FORCE:MULTIPLE
453.povray: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qopt-prefetch -Qauto-ilp32
/F1000000000 shlW64M.lib -link /FORCE:MULTIPLE

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECfp_rate2006 = 79.6

ASUS Sabertooth 990FX (AMD FX-8150)

SPECfp_rate_base2006 = 78.8

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Oct-2011
Hardware Availability: Nov-2011
Software Availability: Apr-2011

Peak Optimization Flags (Continued)

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: basepeak = yes

434.zeusmp: basepeak = yes

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qunroll4 -Qauto /F1000000000
-link /FORCE:MULTIPLE

Benchmarks using both Fortran and C:

435.gromacs: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qopt-prefetch -Qauto-ilp32
/F1000000000 -link /FORCE:MULTIPLE

436.cactusADM: basepeak = yes

454.calculix: /arch:SSE3 -Qipo -O3 -Qprec-div- -Qauto-ilp32
/F1000000000 -link /FORCE:MULTIPLE

481.wrf: basepeak = yes

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic12-winx64-revC.20111012.html>

<http://www.spec.org/cpu2006/flags/Intel-Windows-Platform-Settings-revC.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic12-winx64-revC.20111012.xml>

<http://www.spec.org/cpu2006/flags/Intel-Windows-Platform-Settings-revC.xml>

SPEC and SPECfp are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.1.
Report generated on Thu Jul 24 01:23:13 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 6 December 2011.